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ABSTRACT

This study asks (1) are teachers able to identify creative children in their classrooms at better than chance level, (2) does this ability change with grade level, and (3) does creativity itself increase as a function of grade level in school? The Torrance Tests of Creative Thinking--Circles Subtest--was administered to 455 first, second, and third grade children in 18 classrooms. Scores were obtained on the factors of fluency, flexibility, originality, and elaboration. The five high scorers in each classroom were compared to each teacher's judgement of her five most creative students. Creativity was found to increase with grade level, but correct teacher identifications of such children decreased. The authors conclude that although creativity does seem to increase across grades on all factors, teacher identifications were observed to decrease. Teacher ratings would appear to be unreliable criteria for judging students creativity scores on the Circles Subtest of the Torrance Tests of Creative Thinking. (Author)

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CREATIVITY AND TEACHER JUDGEMENT

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Abstract

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CREATIVITY AND TEACHER JUDGEMENT

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The difficulty of identifying creative children, and indeed of even defining creative behavior, is an elusive task facing the teacher as well as the psychologist.

Creativity is often defined as the use of a rich and varied storehouse of images, concepts, and rules in a constructive and original way. Gowan (1972) writes that creativity is a motovational force arising from the preconscious that can be expressed in varying degrees depending on individual personality dynamics. May (1975) also spoke of creativity as coming from the preconscious out of man's attempt to transcend death. Hilgard (1953) contrasts the creativity of the artist with that of the scientist. He sees the chief differences as not in the processes of thinking, but in the tasks they choose.

Torrance (Daedalus, 1965) found it impossible at the beginnings of his study of creativity to find a definition for which there was any consensus. Some he found formulated in terms of a product, others in terms of a process, a kind of a person, or even a set of conditions.

It is generally felt that creativity and intelligence are different aspects of the intellect or at least are only moderately correlated. Torrance (1965) pointed out that when knowledge is obtained by authority, a measure of mental ability or IQ is a better predictor of achievement than

measures of originality, fluency, flexibility and the like. When knowledge is obtained in creative ways, for example by discovery or experimentation, the measures of originality, fluency, etc. seem to be better predictors than scores on IQ tests. Generally, highly creative children are more productive on frustrating tasks than are less creative children. The least creative children are less productive in open tasks, and the most creative children react less favourably to closed tasks. Thus, children of varying levels of creative thinking ability react differently to different kinds of cirriculum tasks and are possibly best taught by varying procedures.

On the basis of his analysis of the diverse ways of defining creativity and the requirements of a definition for keeping a program of research focused on factors affecting creative growth in context, Torrance defined creativity as a "process of sensing gaps or disturbing missing elements; forming ideas or hypotheses concerning them; testing these hypotheses; and communicating the results; then possibly modifying and retesting the hypotheses" (Torrance, 1966).

We favoured Torrance's definition since it enables one to begin defining operationally the kinds of abilities, mental functioning, and personality characteristics that facilitate or inhibit the creative process. It provides an approach for specifying the kinds of products that result from the process, the kinds of persons who can engage most successfully in the process, and the conditions that facilitate the process. This definition also seems to be in harmony with historical usage and equally applicable in scientific, educational,

artistic, literary and dramatic creativity.

Teacher ratings or judgements of their pupil's creative abilities have been questioned on logical and empirical grounds. Guilford (1967) thought it unlikely that the ordinary classroom could offer opportunities for observing all the significant aspects of creative behavior necessary for making adequate judgements. Frequently, teacher judgements are more highly correlated with IQ test scores than with creativity test scores. When provided with a clearly stated definition of the construct to be rated and with the specific procedure to follow, however, teachers may be able to make ratings that indeed do correspond with the pupil's creativity test scores.

OUR STUDY

This study asks three questions: (1) are teachers able to identify creative children in their classrooms at better than chance level, (2) does this ability change with grade level, and (3) does creativity itself increase as a function of grade level in school?

METHOD

The entire population of first, second, and third grade students of a primary school in a rather large city suburb in California served as subjects for this study. There were six classes of each grade, with a total of 455 subjects. This school draws from a population almost entirely white and the monthly turnover rate of students here is 40%. The entire school is receiving Early Childhood Education funds and has received exemplary ratings from state education officials on their use of such funds.

Teachers were asked to identify their five most creative students. No additional information was given to aid in their selection; it was strictly a judgmental process. The Circles subtest of the Torrance Tests of Creative Thinking was chosen as the appropriate test vehicle because of its relatively good test-retest reliabilities, its ease of administration, and its high interest value to the age groups in the study. This subtest was then group administered to each classroom over two consecutive days. Standard procedure was departed from only be prohibiting the use of crayons.

RESULTS

Tests were scored according to the research edition of the Manual of the Torrance Tests of Creative Thinking on factors of fluency, flexibility, originality, and elaboration. Interscorer reliabilities of above .91 were obtained on all four factors.

Using chi-square tests, we evaluated the degree to which teachers were able to identify the high scoring children at each grade level on each factor. Results varied from chance expectations for fluency and elaboration. The proportion of high scorers correctly identified by teachers actually declined from first through third grades on both factors. Neither the flexibility nor the originality factors showed a significant departure from chance expectations, not a significant change across grade level.

The data strongly suggests an upward trend across grades on all four factors when considering mean creativity scores.

CONCLUSIONS

Although creativity does seem to increase across grades on

all factors, teacher identifications were observed to decrease. Teacher ratings would appear to be unreliable criteria for judging students creativity scores on the Circles subtest of the Torrance Tests of Creative Thinking.

Perhaps, then, there are factors entering into the identification of creative children that are not easily observed in the classroom situation. Individual teachers view creativity in different terms. If we reflect upon the difficulty psychologists have in ariving at a consensus of opinion in defining creativity, this becomes quite understandable.

It was noted in the course of this study that children react in very different ways to the presented task. Some immediately looked pensive and the "wheels began to turn" for them. These children really seemed to enjoy the activity and were highly stimulated by it. Others became frustrated and seemed to have difficulty in even beginning the task. Still others sought praise and encouragement from the teacher and the examiner. Plato said we should direct children to learning by whatever amuses their minds and it seems obvious that those whose "wheels began to turn" found their minds amused by the task. If we could discover the spark of interest for those who became frustrated by such a task they might then be able to use the frustration as a driving force to accomplish the presented task. If adequate praise and encouragement were readily available to those with such needs, perhaps they might be more able to express their talents.

These considerations, along with others, point to the need for more research in the general area of creativity.

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